



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/549,360	09/14/2005	Kazuyuki Miyata	PTB-1207-120	5536
23117	7590	02/24/2011	EXAMINER	
NIXON & VANDERHYE, PC			PILKINGTON, JAMES	
901 NORTH GLEBE ROAD, 11TH FLOOR			ART UNIT	PAPER NUMBER
ARLINGTON, VA 22203			3656	
MAIL DATE		DELIVERY MODE		
02/24/2011		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/549,360	MIYATA ET AL.	
	Examiner	Art Unit	
	JAMES PILKINGTON	3656	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 18 January 2011.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-4 and 6-14 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-4 and 6-14 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 22 August 2009 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ . |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date. _____ . | 6) <input type="checkbox"/> Other: _____ . |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 17, 2010 has been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4 and 6-14 rejected under 35 U.S.C. 103(a) as being unpatentable over JP2002-257146 (US equivalent Ueno, USP 6,918,701 used in discussion below), in view of Pflugner, US PGPub 2003/0002764.

Regarding claim 1, Uneo discloses a strut sliding bearing comprising: an upper casing (3) made of a synthetic resin (C4/L10) and having an annular lower surface (39); a lower casing (2) which is made of a synthetic resin (C4/L10), is superposed on said upper casing (3) so as to be rotatable about an axis of said upper casing (center of assembly), and has an annular upper surface (14) opposed to the annular lower surface (39) of said upper casing (3); an annular thrust sliding bearing piece (4) which is made

Art Unit: 3656

of a synthetic resin (C4/L13-14), and is interposed between the annular lower surface (39) of the upper casing and the annular upper surface (14) of the lower casing, said annular thrust sliding bearing piece (4) having an upper surface (surface of 74) which is in slidable contact with the annular lower surface of the upper casing, and a lower surface (surface of 73) which is in slidable contact with the annular upper surface of the lower casing, wherein said lower casing (2) has on a lower surface (84) thereof a spring seat surface for a suspension coil spring (holds seat plate 86), said lower casing (2) includes an annular base portion (84); an upper cylindrical portion (13) which is integrally formed on a radially substantially central portion of an upper surface of the annular base portion (84) and on which the annular upper surface (14) is formed; and a lower cylindrical portion (86) formed integrally on a radially substantially central portion of a lower surface of the annular base portion (84), said lower surface of the annular base portion on a radially outer side of the lower cylindrical portion serving as the spring seat surface, the annular base portion, the upper cylindrical portion, and the lower cylindrical portion include a plurality of thinning cavities (at 19 and 61).

Ueno does not disclose that the lower casing is configured in one-piece as the spring seat surface and that the thinning cavities open externally at said lower surface of the annular base portion.

Pflugner teaches a strut bearing assembly wherein the lower casing (9a or 9b) that comprises a spring seat surface (15 or 15b) that is configured in one-piece with the lower casing and thinning cavities (18a and 32 or space between webs 43) that open externally at said lower surface of the casing (all surfaces below the bearing support

Art Unit: 3656

section are the lower surfaces of the casing) for the purpose of providing a bearing assembly that is compact (one-piece) in structure and optimized for weight (thinning cavities reduce weight) well maintaining stiffness(see paragraph 0007).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Ueno and provide for the lower casing to be configured in one-piece with the spring seat surface and make the thinning cavities open externally at said lower surface of the annular base portion, as taught by Pflunger, for the purpose of providing a bearing assembly that is compact in structure and optimized for weight well maintaining stiffness.

Regarding claim 2, Ueno discloses a tubular radial sliding bearing piece (5), wherein said upper casing (3) includes an upper annular portion (38) on which the annular lower surface (39) is formed and a cylindrical portion (37) extended integrally downward from a radially inner peripheral edge of the upper annular portion (38) and having a cylindrical side surface (36), said lower casing (2) having a cylindrical side surface (11) opposed to the cylindrical side surface (36) of the upper casing (3), said radial sliding bearing piece (5) being interposed between the cylindrical side surface (36) of the cylindrical portion (37) of said upper casing (3) and the cylindrical side surface (11) of said lower casing (2).

Regarding claim 3, Ueno discloses that said lower casing (2) includes an inner peripheral-side cylindrical projecting portion (16) integrally projecting upward from the annular upper surface (14) on a radially inner peripheral side and an outer peripheral-

side cylindrical projecting portion (15) integrally projecting upward from the annular upper surface (14) on a radially outer peripheral side, said thrust sliding bearing piece (4) being disposed between the inner peripheral-side cylindrical projecting portion (14) and the outer peripheral-side cylindrical projecting portion (15).

Regarding claim 4, Ueno discloses that said upper casing (3) includes an inner peripheral-side cylindrical suspended portion (52) integrally suspended downward from a radially inner peripheral side of the annular lower surface (39) and an outer peripheral-side cylindrical suspended portion (40) integrally suspended downward from a radially outer peripheral side of the annular lower surface (39), said thrust sliding bearing piece (4) being disposed between the inner peripheral-side cylindrical suspended portion (52) and the outer peripheral-side cylindrical suspended portion (40).

Regarding claim 6, Ueno discloses that said upper casing (3) includes an upper annular portion (38) on which the annular lower surface (39) is formed and a cylindrical portion extended (41) integrally downward from a radially outer peripheral edge of the upper annular portion (39).

Regarding claim 7, Ueno discloses a tubular radial sliding bearing piece (5), wherein the upper cylindrical portion of said lower casing (2) having a cylindrical side surface (11) opposed to the cylindrical side surface (36) of the cylindrical portion of said upper casing (3), said radial sliding bearing piece (5) being interposed between the cylindrical side surface (36) of the cylindrical portion (37) of said upper casing (3) and the cylindrical side surface (11) of said lower casing (2).

Regarding claims 8, 10, 11, and 12, Ueno discloses that the [reinforced] synthetic resin used to make the bearings and casing includes at least one of polyacetal resin, polyamide resin, thermoplastic polyester resin, polyolefin resin, and fluororesin (C4/L9-36).

Regarding claim 9, Ueno discloses that said upper casing is adapted to be resiliently fitted and secured to said lower casing (adapted via 45 and 17)

Regarding claims 13 and 14, Ueno discloses that the bearing is used in a four-wheeled motor vehicle (see column 1, lines 8-12) and a suspension coil spring (85) seated at one end thereof on a spring seat surface of said lower casing.

Response to Arguments

Applicant's arguments with respect to claims 1-4 and 6-14 have been considered but are moot in view of the new ground(s) of rejection.

The new combination above using Pflugner to teach a spring seat formed as one-piece with the lower casing of a bearing assembly meets the claim limitations as set forth above since the resulting combination will now have a spring seat that is part of the lower surface of the bearing casing.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES PILKINGTON whose telephone number is (571)272-5052. The examiner can normally be reached on Monday - Friday 7-3.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on (571)272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JAMES PILKINGTON/
Examiner, Art Unit 3656
2/23/11